

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Canceled)

Claim 2. (Previously amended): A semiconductor package comprising:
a metal slug having upper and lower surfaces;
an integrated circuit die, mounted on the metal slug, the integrated circuit die having
signal pads and ground pads;

a lead frame having a plurality of leads; and
a semiconductor package body, wherein signal pads on the integrated circuit die are
coupled to leads on the lead frame, ground pads on the integrated circuit are coupled to the upper
surface of the metal slug and the lower surface of the metal slug remains exposed and extends a
predefined distance outside the semiconductor package, and wherein the predefined distance at
least equals the thickness of a printed circuit board upon which the semiconductor package is
mounted, the metal slug extending through a cutout in the printed circuit board and being
coupled to at least a first ground plane in the printed circuit board.

Claim 3. (Original): The semiconductor package of claim 2 wherein the lower surface of the
metal slug is electrically coupled to a ground plane exposed on a bottom surface of a printed
circuit board.

Claim 4. (Original): The semiconductor package of claim 2 wherein the lower surface of the
metal slug is electrically coupled to a ground pad on a top surface of a printed circuit board, the
ground pad further being electrically coupled to a ground plane within the printed circuit board
by plated-through vias.

Claim 5. (Original): The semiconductor package of claim 2 wherein a heat sink is attached to the
lower surface of the metal slug after it has been extended through the cutout in the printed circuit
board.

Claim 6. (Canceled)

Claim 7. (Previously amended): An integrated circuit package with a metal slug, the metal slug comprising:

an upper surface upon which a semiconductor die is mounted and to which ground pads on the semiconductor die are electrically coupled; and

a lower surface extending at least until it is exposed and co-planar with an exterior surface of the integrated circuit package,

wherein the metal slug is extended so that it can be inserted through a predefined cutout in a printed circuit board upon which the integrated circuit package is mounted, the lower surface of the metal slug being exposed after the integrated circuit package has been inserted into the cutout.

Claim 8. (Original): The integrated circuit package of claim 7 wherein the lower surface of the metal slug is electrically coupled to a ground plane on a top surface of a printed circuit board, upon which printed circuit board the integrated circuit package is mounted.

Claim 9. (Original): The integrated circuit package of claim 7 wherein the lower surface of the metal slug is electrically coupled to a ground plane within a printed circuit board by means of vias through the printed circuit board and a surface ground pad on a top surface of the printed circuit board, the vias coupling the ground plane to the surface ground pad and the lower surface being electrically coupled to the surface ground pad.

Claim 10. (Original): The integrated circuit package of claim 7 wherein a heat sink is attached to the exposed lower surface of the metal slug after it has been extended through the printed circuit board.

Claim 11. (Canceled)

Claim 12. (Canceled)